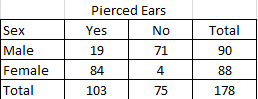
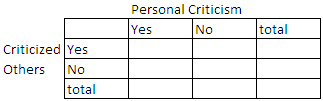
Stat and Data Analysis: Practice 7.2 NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

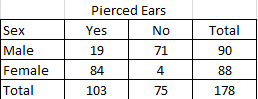
1. P(A) = 0.75; P(B) = 0.44; P(A and B) = 0.38
   1. Create the Venn Diagram
   2. P(A or B) =
   3. P(AC and B) =
   4. P(A or BC) =
   5. P(A and BC) =
2. P(M) = 0.22; P(L) = 0.59; P(M and L) = 0.17
   1. Create the Venn Diagram
   2. P(M and LC) =
   3. P(MC and LC) =
   4. P(M or LC) =
   5. P(MC or LC) =
3. In a random sample of students it was found that 52% were female, 85% had a smart phone, and 39% were females with a smart phone.
   1. Create the Venn diagram
   2. What is the probability that a randomly sampled student is:
      1. Not a female
      2. A female and doesn’t own a smart phone
      3. Not a female and owns a smart phone
      4. Not a female or doesn’t own a smart phone

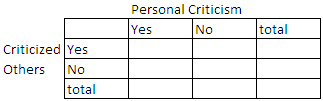


1. Suppose a large college statistics class with 178 students is surveyed to compare sex to whether or not they have pierced ears. The following table shows the outcomes.
   1. What is the probability that a randomly selected student is male?
   2. What is the probability that a randomly selected student has pierced ears?
   3. What is the probability that a randomly selected student is male and has pierced ears?
   4. What is the probability that a randomly selected student has pierced ears given the student is male?
   5. What is the probability that a randomly selected student is male given the student has pierced ears?
   6. What is the probability that a female has pierced ears?
   7. What is the probability that a student with pierced ears is female?
   8. What is the probability that if a student doesn’t have pierced ears that they are male?
   9. What is the probability that if a student doesn’t have pierced ears that they are female?
2. A random sample of chat room users was taken in a study about negative criticisms about others. Out of the 193 people surveyed, 27 said they have criticized others (O), 42 said they have been personally criticized (P), and 19 said they had both criticized others and been personally criticized.
3. Either fill in the table at right, or create a Venn Diagram for this situation.
4. What is the probability that a randomly sampled chat room person is:
5. Has not criticized others
6. Has criticized others and not been criticized personally
7. Has not criticized others or not been criticized personally
8. Has not criticized others or has been criticized personally

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